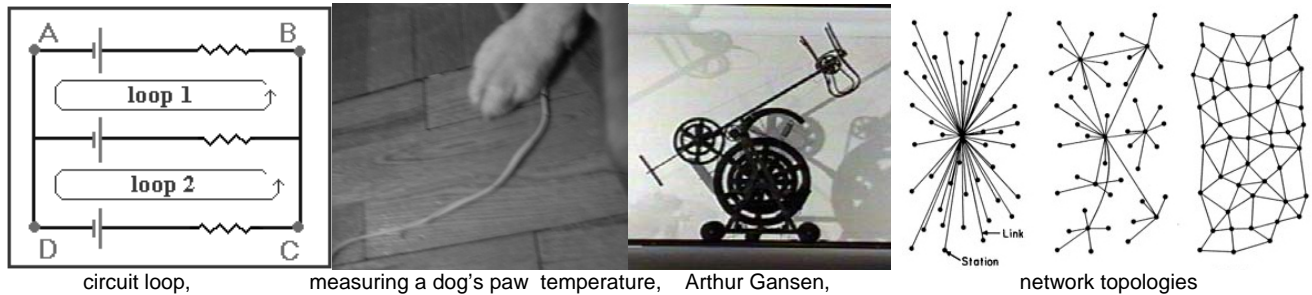


DMS 485/543 MediaRobotics I

Fall 2008, M/W 11-12:50, CFA 246
Associate Professor Marc Böhlen, TA Chris Caporlingua



Course Description

MediaRobotics / Physical Computing I is the first in a series of three courses on concepts and techniques that allow students to appreciate, design, build and program behaving artifacts and environments.

This is a foundation course that will communicate essential knowledge, skills and concepts. Students will be exposed to the basics of electrical and mechanical engineering, as well as electronics and computer programming in a series of practical workshops. The goal of this course is to open the domain of engineering practice to non-engineering students while maintaining focus on an experimental, critical and expressive practice in the arts.

Topics include fundamentals of electricity and electronics, perception and sensing, data, algorithms and programming. Lab sessions are designed to give students practical insight into the topics. Python with Eclipse will be the programming culture of choice. Grades are determined by the results from four semester assignments.

Tentative description of the 6 workshops

week 1	Introduction	
week 2, 3, 4	Workshop 1	signal-power and electronics
week 5, 6	Workshop 2	perception and sensing
week 7, 8	Workshop 3	data and databases
week 9, 10	Workshop 4	motion and motors
week 11, 12, 13	Workshop 5	algorithms and programming
week 14, 15	Workshop 6	communication and networks